

What is claimed is:

1. An array storage system comprising a multiple disc assembly
comprising a carrier from a plurality of different carriers differentiated by a
characteristic array of tubular closed channels, each channel adapted for
supportingly engaging a data storage device.
2. A multiple disc array comprising:
a partition comprising channel surfaces defining a tubular closed passage;
a circuit board disposed in a plane substantially orthogonal to the passage;
a data storage device disposed in the passage, the channel surfaces
circumscribing a cross section of the data storage device in a supporting
mating relationship; and
means for urging the data storage device against the circuit board.
3. The multiple disc array assembly of claim 2 wherein the circuit board is
attached to the partition.
4. The multiple disc array assembly of claim 2 wherein the means for
urging is characterized by a fastener for attaching the data storage device to a
channel surface.
5. The multiple disc array of claim 2 wherein the means for urging is
characterized by a cap that is pressingly engageable against a distal end of the data
storage device.
6. The multiple disc array of claim 5 wherein the means for urging is
characterized by a resilient member between the cap and the data storage device.
7. The multiple disc array of claim 5 wherein the cap and channel comprise
the channel surfaces.

8. The multiple disc array of claim 7 wherein the channel surfaces are discontinuous.

5 9. The multiple disc array of claim 2 wherein the means for urging is characterized by a threaded fastener that is compressingly engageable against the data storage device

 10. A carrier for supporting a circuit board and one or more data storage devices in a multiple disc array, comprising:

10 a partition comprising channel surfaces defining a tubular closed passage, the channel surfaces adapted for circumscribing a cross section of the data storage device in a supporting mating relationship; and means for urging a data storage device in the passage in pressing engagement against the circuit board.

15 11. The carrier of claim 10 wherein the means for urging is characterized by a fastener for attaching the data storage device to a channel surface.

 12. The carrier of claim 10 wherein the means for urging is characterized by a cap that is pressingly engageable against a distal end of the data storage device.

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 13. The carrier of claim 12 wherein the means for urging is characterized by a resilient member between the cap and the data storage device.

25 14. The carrier of claim 12 wherein the cap and channel comprise the channel surfaces.

 15. The carrier of claim 14 wherein the channel surfaces are discontinuous.

30 16. The carrier of claim 10 wherein the means for urging is characterized by a threaded fastener that is compressingly engageable against the data storage device

17. A method for supporting a plurality of data storage devices in a multiple disc array comprising:

5 providing a carrier from a plurality of different carriers differentiated by a
 characteristic array of tubular closed channels for supportingly
 engaging data storage devices;
 inserting one or more data storage devices in a respective number of
 channels defining the multiple disc array; and
 inserting the carrier in the shelf.

10 18. The method of claim 17 comprising:
 removing the carrier from the shelf;
 changing the multiple disc array configuration; and
 re-inserting the carrier in the shelf.

15 19. The method of claim 18 wherein the changing step comprises inserting
 another data storage device in a channel.

 20. The method of claim 18 wherein the changing step comprises
 removing a data storage device from a channel.

20 21. The method of claim 18 wherein the changing step comprises
 providing a different carrier, and the re-inserting step comprises re-inserting the
 different carrier in the shelf.